Managing Sensitive Information

Guidelines

Mike Domoratz from USGS updated efforts to produce guidelines for managing sensitive geospatial data. The basic questions are "What data is sensitive?" and "If we find some, how do we restrict it?" The general goal is to maximize access to data that is not sensitive. It's possible to change the data to protect the sensitive bits but keep the rest useful. That's preferred over controlling access. However, if changing the data makes it useless, then the best choice is some restriction on use. The guidelines are in the form of a decision tree and should be available for review in the next month or so. (See also the discussion of the RAND study, on which much of this work was based, below.) A plug: if you get a chance to hear Mike speak, do so. He is always informative and entertaining.

The RAND Study

The RAND study, officially titled *Mapping the Risks: Assessing the Homeland Security Implications of Publicly Available Geospatial Information* is now online. It's a 200-page <u>report</u> funded by USGS and NGA and as I noted above, will form the basis of guidelines for dealing with sensitive data. I suggest folks opt for the three-page <u>summary</u>, which is pretty interesting reading.

Briefly, the study found that information that attackers might use to select a target is widely available, but that details needed to actually plan an attack are scarce and would require significant research to obtain. Moreover, a structured survey of publicly available federal geospatial data sets and a close examination of 629 of those revealed that less than 1% were both useful to terrorists and uniquely available from those sources. Identical, similar, or better data was available from non-federal sources. The report also explores the potential costs and benefits of restricting public access to such data.

Dealing with Sensitive Data: Stories from the States

As a fascinating follow-up to the RAND study, the coordinators from two states shared their experiences with sensitive data. Some of the decisions these states made:

- Contractors were restricted from taking data regarding nuclear or military and road or hydro data sites offshore.
- The state licensed the data (imagery) to local governments with the restriction that before it was made available on the Web, the local governments had to work with local military bases to explore any issues such distribution posed.
- Regional imagery products for 911 were "dumbed down," that is, resolution was lowered so details were blurred.
- Both states felt that "dumbing down" the data was less visible than "air brushing" out features, which would draw more attention to sensitive areas.
- Neither state felt that the changes really protected against terrorists as the data was all available elsewhere. Both noted it was done for political reasons. "The bad guys weren't going to get the data from us."

- As one state put it "reality is perception" and authorities need to be perceived as "doing something."
- One state took its clearinghouse offline for two months while it removed "tiles" that contained sensitive information. There were 500 sensitive sites on 170 quads and 1,600 orthophoto tiles (the tiles are very small).
- There was a process available to access the removed tiles. It included explaining why they were needed and some identification materials. In one year the state received about 3,000 requests for data that was not available online. That caused the state to rethink the process. Most of the requests were from private engineering firms
- As of last November all the quads were back online. Ortho tiles are in the process of being "blurred." The state called upon a local university to develop an algorithm to blur just the footprints of the sensitive areas, again, attempting not to draw attention to them. While the state GIS staff had the ability to blur the images itself, the leadership decided the credibility of the university was important.

In short, the uniqueness of the data, highlighted in the RAND report, didn't seem to matter in these decisions. All of the data was widely available elsewhere, but both states felt it politically correct to alter at least some of it.